

## **ATTACHMENT H**

### **Definitions For GENERAL WASTE DISCHARGE REQUIREMENTS AND GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR EXISTING MILK COW DAIRY CONCENTRATED ANIMAL FEEDING OPERATIONS WITHIN THE CENTRAL VALLEY REGION**

1. “Agronomic rates” is defined as the land application of irrigation water and nutrients (which may include animal manure, bedding, or process wastewater) at rates of application in accordance with a plan for nutrient management that will enhance soil productivity and provide the crop or forage growth with needed nutrients for optimum health and growth.
2. “Anaerobic digester” is defined as a basin, pond, or tank designed, constructed, maintained, and operated for the anaerobic treatment of liquid or solid animal waste and which promotes the decomposition of manure or “digestion” of the organics in manure to simple organics and gaseous biogas products.
3. “Animal Feeding Operation” or AFO is defined as a lot or facility where the following conditions are met: (i) animals have been, are, or will be stabled or confined and fed or maintained for a total of forty-five (45) days or more in any 12-month period, and (ii) crops, vegetation, forage growth, or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.
4. “Aquifer” is defined as ground water that occurs in a saturated geologic unit that contains sufficient permeability and thickness to yield significant quantities of water to wells or springs.
5. “Artificial recharge area” is defined as an area where the addition of water to an aquifer is by human activity, such as putting surface water into dug or constructed spreading basins or injecting water through wells.
6. “Central Valley Water Board” is defined as the California Regional Water Quality Control Board, Central Valley Region.
7. “Certified Nutrient Management Plan” is defined as a nutrient management plan that is prepared and signed by a specialist who is certified in developing nutrient management plans. A certified specialist is: a Professional Soil Scientist, Professional Agronomist, Professional Crop Scientist, or Crop Advisor certified by the American Society of Agronomy; a Technical Service Provider certified in nutrient management in California by the Natural Resources Conservation Service; or other specialist approved by the Executive Officer.

8. "Concentrated Animal Feeding Operation" (CAFO) is defined as any dairy AFO that is either large (AFO with 700 mature dairy cows), medium (AFO with 200-699 mature dairy cows and which discharges pollutants to waters of the United States as specified), or small (less than 200 mature dairy cows and which has been specifically designated as discharging pollutants to waters of the United States)
9. "Confined area" is defined as the area where cows are confined within the production area.
10. "Cropland" is defined as the land application area where dry or solid manure and/or process wastewater is recycled for the purpose of beneficially using the nutrient value of the manure and/or process wastewater for crop production.
11. "Degradation" is defined as any measurable adverse change in water quality.
12. "Discharge" is defined as the discharge or release of waste to land, surface water, or ground water.
13. "Discharger" is defined as the property owner and the operator of an existing milk cow dairy subject to Waste Discharge Requirements General Order No. R5-2007-0035.
14. "Existing milk cow dairy" or "existing facility" is defined, consistent with Title 14 CCR Section 15301, as a milk cow dairy that is fully constructed and operating as of 17 October 2005, for which a complete Report of Waste Discharge was submitted in response to the 2005 Report of Waste Discharge Request Letter, and which has subsequently undergone no expansion in the size or scope of its herd, facilities, or operation.
15. "Existing herd size" is defined as the maximum number of mature dairy cows reported in the herd on 17 October 2005 plus or minus 15 percent of that reported number to account for the normal variation in herd sizes.
16. "Expansion" is defined as, but not limited to, any increase in the existing herd size (i.e., by more than 15 percent of the maximum number of mature dairy cows in the herd on 17 October 2005) or an increase in the storage capacity of the retention ponds or acquisition of more acreage for reuse of nutrients from manure or process wastewater in order to accommodate an expansion of the existing herd size. "Expansion" does not include installation or modification of facilities or equipment to achieve compliance with the requirements of Waste Discharge Requirements General Order No. R5-2007-0035 so long as the modification or installation is sized to accommodate only the existing herd size.
17. "Facility" is defined as the property identified as such in Waste Discharge Requirements General Order No. R5-2007-0035.

18. "Fecal coliform" means the bacterial count (Parameter 1) at 40 CFR 136.3 in Table 1A which also cites the approved methods of analysis.
19. "Field moisture capacity" is defined as "the upper limit of storable water in the soil once free drainage has occurred after irrigation or precipitation."
20. "Freeboard" is defined as the elevation difference between the process wastewater (liquid) level in a pond and the lowest point of the pond embankment before it can overflow.
21. "Incorporation into soil" is defined as the complete infiltration of process wastewater into the soil, the disking or rotary tiller mixing of manure into the soil, shank injection of slurries into soil, or other equally effective methods
22. "Irrigation return flow" is defined as surface and subsurface water that leaves a field following application of irrigation water.
23. "Land application area" is defined as land under control of the milk cow dairy owner or operator, whether it is owned, rented, or leased, to which manure or process wastewater from the production area is or may be applied for nutrient recycling.
24. "Manure" is defined as the fecal and urinary excretion of livestock and other commingled materials. Manure may include bedding, compost, and waste feed.
25. "Manured solids" is defined as manure that has a sufficient solids content such that it will stack with little or no seepage.
26. "Mature dairy cow" is defined as a dairy cow that has produced milk at any time during her life.
27. "New source" is defined in the federal regulations as *"any building, structure, facility, or installation from which there is or may be a 'discharge of pollutants,' the construction of which commenced: (a) After promulgation of standards of performance under section 306 of CWA which are applicable to such source, or (b) After proposal of standards of performance in accordance with section 306 of CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal."* (40 C.F.R. § 122.2) Further, a facility is a "new source" if (1) the facility is constructed at a site where no other facility is located, (2) the facility totally replaces the process or production equipment that causes the discharge of pollutants at the existing facility, or (3) the facility process is substantially independent of an existing facility at the same site. (40 C.F.R. §122.29 (b)).
28. "Normal precipitation" is defined as the long-term average precipitation based on monthly averages over the time that data has been collected at a particular

weather station. Normal precipitation is usually taken from data averaged over a 30-year period (e.g. 1971 to 2000) if such data is available.

29. "Nuisance" is defined in the Porter-Cologne Water Quality Control Act as "...*anything which meets all of the following requirements:*
- (1) *Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.*
  - (2) *Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.*
  - (3) *Occur during, or as a result of, the treatment or disposal of wastes."*
30. "Nutrient" is defined as any element taken in by a plant which is essential to its growth and which is used by the plant in elaboration of its food and tissue.
31. "Nutrient recycling" is defined as the application of nutrients at agronomic rates for crop production.
32. "Off-property discharge" is defined as the discharge or release of waste beyond the boundaries of the property of the dairy's production area or the land application area or to water bodies that run through the production area or land application area.
33. "Open tile line intake structure" is defined as an air vent for a subsurface (tile) drain system.
34. "Order" is defined as the Waste Discharge Requirements General Order.
35. "Overflow" is defined as the intentional or unintentional diversion of flow from the collection, treatment, land application, and conveyance systems, including pumping facilities.
36. "Pollutant" is defined in Title 40 Code of Federal Regulations Section 122.2 as "...*dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water."*
37. "Pollution" is defined in Section 13050(l)(1) of the Porter-Cologne Water Quality Control Act as "...*an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following: (A) The waters for beneficial uses. (B) Facilities which serve these beneficial uses."*

38. "Pond" is defined as retention ponds, storage ponds, settling ponds, or any structures used for the treatment, storage, disposal, and recycling of process wastewater. Ponds are differentiated from sumps, which are structures in a conveyance system used for the installation and operation of a pump.
39. "Process wastewater" is defined as water directly or indirectly used in the operation of a milk cow dairy for any or all of the following: spillage or overflow from animal watering systems; washing, cleaning, or flushing pens, barns, manure pits, or other dairy facilities; washing or spray cooling of animals; or dust control...and includes any water or precipitation and precipitation runoff which comes into contact with any raw materials, products, or byproducts including manure, feed, milk, or bedding.
40. "Production area" is defined as that part of a milk cow dairy that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas.
41. "Regional Board" is defined as one of the nine California Regional Water Quality Control Boards.
42. "Salt" is defined as the products, other than water, of the reaction of an acid with a base. Salts commonly break up into cations (sodium, calcium, etc.) and anions (chloride, sulfate, etc.) when dissolved in water. Total dissolved solids is generally measured as an indication of the amount of salts in a water or wastewater.
43. "Salt in animal rations" is defined as the sodium chloride and any added minerals (such as calcium, phosphorus, potassium, sulfur, iron, selenium, copper, zinc, or manganese) in the animal ration.
44. "Significant quantity" is defined as the volume, concentrations, or mass of a pollutant that can cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; and/or cause or contribute to a violation of any applicable water quality standards for the receiving water.
45. "Sole-source aquifer" is defined as an aquifer that supplies 50 percent or more of the drinking water of an area.
46. "State" is defined as the State of California.
47. "State Water Board" is defined as the State Water Resources Control Board.
48. "Significant storm event" is defined as a precipitation event that results in continuous runoff of storm water for a minimum of one hour, or intermittent discharge of runoff for a minimum of three hours in a 12-hour period.

49. "Storm water" is defined as storm water runoff, snowmelt runoff, and surface runoff and drainage.
50. "Subsurface (tile) drainage" is defined as water generated by installing and operating drainage systems to lower the water table below irrigated lands. Subsurface drainage systems, deep open drainage ditches, or drainage wells can generate this drainage.
51. "Surface water" is defined as water that includes essentially all surface waters such as waters of the United States and their tributaries, interstate waters and their tributaries, intrastate waters, all wetlands and all impoundments of these waters. Surface waters include irrigation and flood control channels.
52. "Tailwater" is defined as the runoff of irrigation water from an irrigated field.
53. "25-year, 24-hour rainfall event" is defined as a precipitation event with a probable recurrence interval of once in twenty five years as defined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States," May, 1961, or equivalent regional or State rainfall probability information developed from this source.
54. "Waste" is defined as set forth in Water Code Section 13050(d), and includes manure, leachate, process wastewater and any water, precipitation or rainfall runoff that came into contact with raw materials, products, or byproducts such as manure, compost piles, feed, silage, milk, or bedding.
55. "Waters of the state" is defined in Section 13050 of the California Water Code as *"...any surface water or groundwater, including saline waters, within the boundaries of the state."*
56. "Waters of the United States" is defined in 40 CFR § 122.2 as (a) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the United States under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f)



The territorial sea; and (g) “Wetlands” adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in [40 CFR § 423.11\(m\)](#) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. [See Note 1 of this section.] Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act jurisdiction remains with EPA.

57. “Wet season” is defined as the period of time between 1 October and 31 May of each year.